1: Gayton E-5 (1925-1930) 1948 NS29 Yokuts NS29

INTERTRIBAL RELATIONS

101 184 The tribes living in the swampy territory around the Tulare Lake were the nucleus of a Yokuts culture which differed in many respects from that of the foothill and hill people. The divergence was not merely that due to a fundamentally different ecological background; it was manifest also in their dichotomous social organization and ceremonial practices. The lake tribes' cultural link was with the Yokuts of Kings River and northward, and with the Wowol to the south rather than toward the eastward hills.

115 The localities and intertribal relations of the lake tribes are presented by Kroeber,[23] and to his information we have little to add. Our Tachi informant (M.G.), long away from childhood scenes, was unable to formulate precise information on her native village region. The need for two interpreters to translate her conversation (Tachi to Wukchumni, Wukchumni to English) did not add clarity. The Chunut informant (J.A.) excellent in other respects, was unclear on local topography, whereas her knowledge of names and locations of distant tribes was remarkably accurate. The information obtained from these two women has been added to that of Kroeber and mapped in Local Map A (map 2).

578 609 According to M.G. there was no intercamp or intervillage quarrelling among the Tachi. But bitter feeling, resulting in occasional fights, existed between the Tachi and the valley tribes living north of Kings River, known collectively to the Tachi as Hoshima (ho´šima, northerners). The Nutunutu, as the nearest of these, were specific enemies of the Tachi. If these people attempted to come into Tachi territory for seeds or game, the Tachi "met them halfway and made them go back." The Chunut did not fight the Hoshima, M.G. said (but see Chunut informant's account, p. 9).

439 436 The Tachi were on friendly terms with all the groups bordering on the lake, but particularly with the Wowol who came as far north as the Wolasi in their balsas to trade. They tied the balsas to tules and slept on them at night. The Wowol wanted a grass-seed food and traded shell money in return. The Wowol acquired the shells from the To´kya (Salinan), who lived at ču´lama,[24] near the ocean, and far west and

[23] Handbook, 474-486.

[24] A Salinan site on Cholame Creek, an upper tributary of the Salinas River.

439 south of the mountains (the Coast Range). The
436 Tokya ate the fish from the shells and traded these to their inland neighbors. Usually the buyer made them up into money: this was what the Wowol did. The Tachi went to Wolasi villages to trade with the Wowol, but no farther south, as Yi´nel was the most southern Tachi village. The Tachi, Wolasi, and Chunut traded seed foods in exchange.

439 The Telamni came out to the Wolasi to
574 visit but not to trade (sic). They, the Wechihit, Wolasi, and Chunut came to Tachi mourning ceremonies at Telwe´yɛt. The Gawia did not ever visit so far west.

361 The large Tachi village called Telweyɛt
115 was on the edge of the lake south of the present town of Lemoore. An important chief there was Luču´ši. The informant M.G. was born there; after her marriage she moved "a little east up the river [Kings?] to a village called Gaiwo´šyu. The barren area west of Tulare Lake which extended as far as the Coast Range and was roamed over by Tachi was called Utju´i. (Kroeber places a village, Udjiu, in this area.) There was a pond near Loston Hills.

578 The Chunut informant, J.A., gives a differ-
361 ent picture of Tachi relations, but her less intimate view of the situation makes it seem unreliable. She states that the Tachi, Wowol, and Chunut fought frequently, with the Tachi and Nutunutu as allies against the combined Chunut and Wowol. Telweyɛt, a Tachi village, was at Summit Lake. At Woko´n were a series of camps among which the Tachi moved, especially when one camp had been visited by death. J.A. named Hono´tan (to stop suddenly) and Či´yi (bones) as two important Nutunutu villages, both near Kingston. Čiyi is undoubtedly Kroeber's Chiau. A chief there was Oli´kɛs, nicknamed Nai'nai´'i'ɛs (Squint-eye) because he was cross-eyed. The Nutunutu was a very large tribe, J.A. said.

101 The Chunut on Tulare Lake had Tachi and
131 Nutunutu neighbors toward the north. Their land extended eastward almost to the present site of Tulare (city), east of which dwelt the Wolasi. The main Chunut rancheria, which J.A. pronounces pi´sras, a pronunciation I believe is a corruption of "Pierce's Ranch," was near Farmersville, which she claimed was Chunut territory (čunu´tači pa'an). Near Tulare (city)
101 was a bottomless pond called mike´yɛt; things
484 which fell in were never recovered. The Chunut
131 frequently walked over to the ocean across the mountains to the west, provided relations were

[P. 216] Tachi

302 could paint his face any way he liked if he did not want to follow a totemic pattern. After ceremonial washing a man's face was covered with red paint; sometimes a little white paint was put on a woman.

The following information is from Mr. E.W. Gifford, who kindly put his data on Tachi moieties at my disposal.

302 The Tachi employed moiety face paints. The
616 toxelyuwic painted a "pink" stripe of wild rose-
[824] bush powder[48] from the edge of the hair on the forehead down to the tip of the nose, and a horizontal stripe under each eye. A small black spot was added under each horizontal stripe of pink.

The nutuwuts moiety painted the right side of the face solid white, the left solid black. No spots were added.

It seems probable that the informant who gave these data described patterns characteristic of some animal (lineage totem) associated with each moiety. There is no suggestion of specific moiety patterns from any informants of
[613] moiety-divided tribes. The lineage is the essential unit; but if forced to characterize moieties, an informant will choose some important animal (lineage totem) of each, most frequently Coyote and Eagle. Without further detail being given, it would appear that all persons of one moiety or the other had these animals as totems. I believe it is thus with the two paint patterns described to Gifford: that the informant oversimplified.

Money Manufacture

436 The shells for money were obtained whole
321 from the Tokya (Chumash, Salinan, or other
[439] coastal people to the west). By laying them on a rock and giving them a sharp blow with a stone held in the hand, they were broken up into several parts, which were again cracked into smaller pieces by the same method. Each piece was given a circular shape by rubbing down its edge on a large, flat, hard rock. The
[412] discs were then drilled by means of a drill (wa'lai) of bone which was imbedded in the end of a button willow stick. The palm of the left
[237] hand,[49] gummed with fish glue, rolled the drill on the left thigh while the right hand pressed the disc against the rotating tip.

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[48] Concerning the possible derivation of this powder Professor H.L. Gardner, of the University of California, writes me [Gifford]: "There is a fungus growing on certain species of roses which causes distortions in the branches of the rose, such distortions being filled with masses of orange colored spores. It is barely possible that these might make a temporary pigment."

[49] Practices with the left and right hands are uncertain with this informant, who is herself left-handed.

T Y 343 no door, the doorway being merely an opening between the rafters [there probably was a doorway frame of some sort]. The fire was in front of the center post. Firewood was kept in two piles, one on each side of the entrance; men sitting next to these put wood on the fire.

T Y [354]

Men did not indulge in sweats until they were twenty-five to thirty years old. Evening [late afternoon?] was the most popular time for a sweat, after which they would swim and return home to sleep. While in the sweat house men usually "just lay around." Sometimes, merely to entertain others or to practice, a man would dance the ha´t:m (the "piston-rod step" of Powers) if someone would sing for him. For such a performance there was no costume; it had no ritual significance. No games were played in the sweat house, nor was smoking indulged in -- "it was too strong in there."

T Y 515

T Y 517

MISCELLANEOUS DATA

T Y 524

Games.---Women played huču´w:s, the walnut-shell dice game, in the daytime only.

Pottery.---Pottery was made at Sototlo by women. The pounding of the clay paste, the coiling process were the only details remembered.

T Y 323

Money.---The small disc money of clamshells was measured by doubling a strand and then slipping it into a series of chain-stitch loops. A "rope" long enough to reach from the wrist to the shoulder, was worth $2.00 in "American money." Such a strand was exchanged for an eagle's leg with the down still intact.

T Y 436

Blankets.---F.M. did not know how "woven" skin blankets were made, save that strips of rabbitskin or wildcatskin were used in them.

T Y 286

Calendar.---A calendrical system of months based on moons was used in the old days. The only name he remembers was that for the month roughly coincident with February: kala´sa, meaning "blows it all away" or "cleaned up," because it was a period of high winds, trees were bare, and the leaves all blown away.

T Y 805

Hair nets.---These were used "everywhere" for the basis of feather head ornaments. A single hairpin (tsama´ni) held the ornament in place. Neither the net nor hairpin was used for ordinary dress, nor by women.

T Y 301

Yellowhammer strips.---Ornamental bands of sewn yellowhammer feathers (paiya´man) were known but rarely used.[130] A doctor who owned one would wear it for the dancing on the night of celebration following a mourning ceremony. It was never used when the doctor was dressed for curing; it was "just to look pretty." The band was worn around the head with the ends hanging down the back.

T Y [237]

Musical instruments.---The flute (uṭoi´´i) was made of elderwood; number of holes not

T Y 534

[130] Cf. Kroeber specimen (ibid., pl. 58).

854 baby and mattress were both lashed to it by means of one set of cords. The cradle frame
335 (with its permanent mat) was called a'hᵃ ́lᵃč; the separate mat (mattress), even when the infant slept in it, was still called mat (ṭᵃñi, the usual word for a tule mat). Such a cradle is shown by Kroeber.[203]

If the cradle needed a hood, a broad band of tules, vertically twined about every inch, was fastened on as an addition. Apparently it was not thought of as an integral part of a normal cradle.

[177] The fan-shaped hood and lattice-twined cradle of willow are a recent introduction from the Mono. This information on cradles from M.L., Wukchumni, and M.S., Yaudanchi.)

According to M.L. and K.G. the forked-frame cradle was lathed differently for girls and boys; the boys' cradle had two crosspieces, the girls' but one. The single crosspiece arrangement permitted a bulging of the soft mat so the baby girl's buttocks would not be confined and would grow large. It is to be noted that no such arrangement is made in the recent twined-frame cradles. These, however, carry markings in accordance with the sex of the occupant, zigzag for boys and diamond for girls.

MONEY, NUMERAL SYSTEM

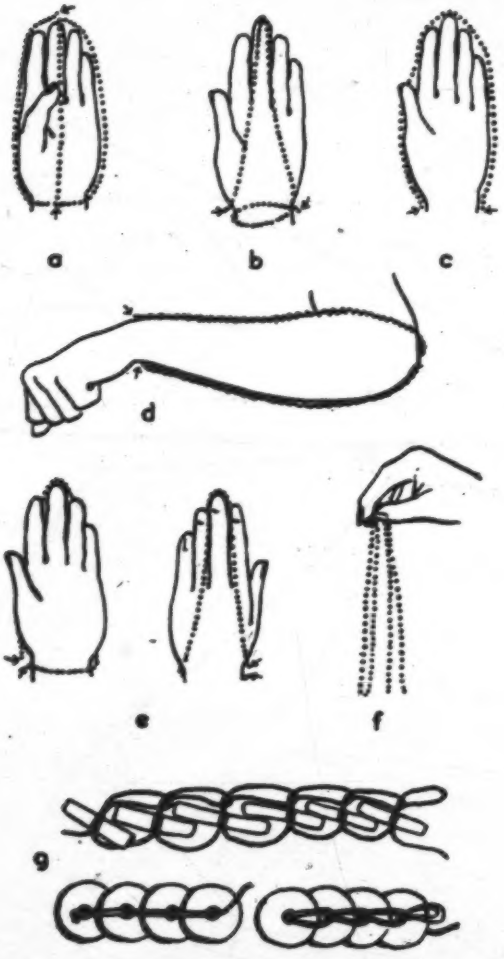
● 436 The foothill people probably never manufactured money, although the intermediate Gawia would do so when they could obtain the raw material -- unbroken clamshells. A few pieces could be made out of the freshwater oyster shells available at Woodlake and in the slough region, but the greater part of the shell was said to be "too rough." Clamshells and money came from the Chumash, Salinan, and perhaps
[439] Costanoan peoples, passing through the hands of the intervening lake and valley tribes who in turn bought mountain and foothill products -- bows, fire and digging sticks, salt, and fine baskets. The various shell moneys were as follows: home ́tᵘn (humna, humana, pl.), a long tube (1-1/2 to 2-1/2 inches) made from the hinge of large clamshells; koikoi ́čᵘ, a short tube (1/2-inch) of white, probably also a "hinge" and used in ornamental belts; moco ́ko, the small disc of clamshell which, in strings, was the common currency. European beads have
[177] acquired Yokuts names: in Wukchumni, hoi ́yo is a small red glass bead,[204] and tedi ́diduš is a glass bead with the surface planed to represent cut facets.

436 The descriptions of the method of measur-
804 ing strings of clamshell discs and the values
435

[203] Ibid., pl. 40, m; mattress, pl. 40, n.

[204] Called in English "pomegranate seeds" by M.F.: pomegranate trees are grown abundantly in the Visalia-Lemon Cove district.

436 804 435 attached to them differ slightly from informant to informant (fig. 14, a, b). The čok, the measurement around the hand, all informants agree, was equivalent to 5 cents. Other values were about as follows: 2-1/2 čok was called hista´'a and equaled 10 cents; 2 hista'a equaled 20 cents. A single strand which reached from the wrist around the elbow and back was valued at $2.00, but a continuously half-hitched strand covering the same distance



[284]

Fig. 14. Bead money measurements. a, b, d, Wukchumni. c, Kechayi. e, f, Waksachi. g, method of half-hitching beads together.

[p. 889]

435 was $5.00 (fig. 14, d). This means half-
436 hitched or "chain-stitch" loops in the already
804 strung length of discs, which nearly tripled the quantity of a plain length from wrist around elbow and back to wrist.[205] A cylindrical bead called humna was worth twenty-five cents.

535 The participants and singers in a ritual
465 like the mourning ceremony or an ordinary pleasure dance would be given about 1/2 čok in payment by spectators. There was no fixed amount: if a person really could not afford to give more than a few beads he was not thought miserly. At times of display or for payment of individual performers, as at the death of Huhuna in the Huhuna Dance, long strings of money were thrown down.

556 A definite attempt to accumulate wealth was made by chiefs, shamans, and probably others who hoped to acquire prestige. Even when money was not the medium of exchange, value for value was the expectancy, not, however, with the shrewd, mercenary motivation of receiving, but with the courteous, generous motivation of giving, and maintaining moral status thereby.[206]

436 Kroeber, in a general reference to money,[207]
804 states that the unit of measurement in the north was the chok, one and a half times the circumference of the hand. In the south the chok was somewhat shorter, and was reckoned as half the hista, twice the circumference of the hand.

Powers gives a somewhat different evaluation, which may have been the rate of his day.[208]

> The usual shell-money is used among them, and a string of it reaching from the point of the middle finger to the elbow is valued at 25 cents. A section of bone [sic], very white and polished, about two and a half inches long, is sometimes strung on the string and rates at twelve and one-half cents.

Numerals

802

1. yɛt	6. tu ´dipi
2. po ´noi	7. no ´mč:n
3. so ´p:n	8. mo ´nus
4. ha ´po ´ni	9. no ´n:p
5. yu ´ts:nuk	10. ṭi ´´uv

[172] [205] A half-hitched string with a bead on each loop was a method of bead-stringing exemplified in Pueblo II material from Nevada (vide Cody, Simply Strung). This method may account for the "shingled" beads found with a bear burial in the San Joaquin Valley (Heizer and Hewes, Animal Ceremonialism, 589).

[431] [206] Taking small gifts of cigarettes or candy to old
576 Yokuts people presented a problem to the recorder because of their quiet insistence upon a return of some kind; refusal to accept a gift in exchange would be a subtle offense.

[207] Handbook, 498.

[208] P. 375.

302 192 who "wanted to fix up for dances." It was associated with the Tokelyuwich moiety.

386 822 hu ´iyu: red. This doctors bought from the Western Mono; the Eastern Mono were the ultimate source. It was the Nutuwich color.

ša ´lu: black. Charcoal.

wa ´wun: green (called blue by a Wobonuch informant). It is said to have been introduced by the Paiute who brought the Ghost Dance.

302 616 Face patterns E.M. could not describe beyond this statement: that the Tokelyuwich covered the face with white and added two vertical stripes of green [black in earlier times?], and that the Nutuwich merely used red horizontal stripes.[59] She added that the Tokelyuwich sometimes put white horizontal streaks across their upper arms (but see sweat house dance). Shamans were the usual owners and traders of paint.

436 Money.--Values for clamshell disc beads were: once around the hand without crossing the wrist, 25 cents; five times around the hand, $5.00. This is incongruous, of course (see fig. 14, c, Pt. I).

802 192 Numeral system.--The usual Yokuts numerical system, based on 10, was used by Kechayi, Gashowu, and Dumna. E.M. gave the following Kechayi count:

1. yɛt	14. ha ´čpam
2. po ´noi	15. yɛ ´čam
3. so ´pɨn	16. čo ´lpop
4. hatpa ´nai	17. no ´mčom
5. yɛčɛ ´nɨl	18 mu ´nčum
6. čo ´lɨpi	19. no ´mpom
7. nu ´mčɨn	20. ponoi ṭe ´yiu
8. mo ´noš	21. ponoi ṭeyao yɛt
9. no ´nɨp	22. ponoi ṭeyao ponoi
10. te ´yao	23. ponoi ṭeyao so ´pɨn,
11. yɛ ´čam	etc.
12. bo ´čtop	100. yɛt pi ´ča
13. so ´pi ´op	1000. yɛt mi ´la (Sp.)

GAMES

526 [616] Shinny.--This game (ko ´nɨč). was played by both sexes. The sticks and ball were of "some hard wood." Usually there were three people on each side; moiety opposition functioned when the game was played at mourning ceremonies. The Kechayi played the game around the turning post, which was not struck or aimed at.

Tossed hoop and pole.--E.M. had not seen this game (ha ´lao) played; she had "just heard the old people talk about it."

[237] Football.--For this game (i ´wač) two posts were set up about one hundred feet apart. A ball of deerskin stuffed with grass was kicked and scuffed along the ground between two opponents. They pushed each other vigorously to maintain possession of the ball. They started from one post, went in a circuit around the

[59] Cf. Gifford, Miwok Moieties, 146.

411 Arrows were of an unidentified wood.[113] For the sinew-backed bow they were about two feet, six inches in length. Three split feathers were fastened on with wet sinew; these were slightly spiraled to make the flight straight.

The same type of bow and arrow was used for fighting as for hunting, said J.R. "You can't shoot very far with an arrow; it doesn't go straight. You have to shoot high, let it come down on the target. They can shoot farther but can't kill anything if it is very far off."

[324] The recorder saw four arrowheads at the Wyatt's place. These were called flint, but Thrall thinks they were of obsidian.

Four Chukchansi arrows in the Peabody Museum (specs. 76475) are of cane with inserted foreshafts. Their dimensions are: (1) shaft, 26-1/2 in. plus 5-in. foreshaft; (2) shaft, 29-1/2 in. plus 7-in. foreshaft; (3) shaft, 30 in. plus 7-in. foreshaft; (4) shaft, 30-1/2 in. plus 7-in. foreshaft. Sinew wrappings on forward ends where foreshafts are inserted measured: (1) 1-1/4 in., (2) 1-1/4 in., (3) 1-1/2 in., (4) 1-1/2 in. Three vanes of feathers, not spiraled, on each arrow are trimmed straight off at the butt ends. They ride free from the arrowshaft except for the binding at each end; their free lengths are: (1) 2-1/2 in., (2) 2-1/2 in., (3) 3 in., (4) 3 in.. All the shafts are 3/8 in. in diameter.

MISCELLANEOUS DATA

501 Boats and weirs.--There were no boats or rafts for crossing rivers. Only in play would boys sometimes get logs, roll them in the water, and ride downstream on them.

227 In Chukchansi territory Powers saw fish weirs with inserted traps into which fish were driven from upstream by means of a brush sweep similar to that of the Wobonuch (fig. 3, b); see below. They also speared fish from a booth over the water like that described by Mayfield for the Choinimni.[114]

436 Money.--Several kinds of beads were shown Miss Thrall by N.W. and C.D. who said they were 321 "grave beads" and named them as follows. The descriptions are Miss Thrall's.

Supna: cylindrical white bead, 1/4-in. long, same diameter, small hole through center. Said to be cut from a larger bead about an inch long. One bead (long or short?) was worth a

[824]

[113] From a bush which grows beside creeks, is something like willow, but has a nearly round serrated leaf. The wood is straight and tough. It is not common, just a few bushes grow near J.R.'s place. It grows about 8 feet tall "like an elderberry."

[114] Powers, Tribes of California, 376.

436 dollar:[115] The informants were uncertain about the material, merely saying that the beads were 321 made far off at the ocean. Later N.W. said a string of these beads, which would encircle the flat hand, was worth 50 cents. This standard [804] measurement of beads, the circumference of the flat hand, was called kelan or k'ečan.

hakemesha: darkish red, white center, 1/4-in. long, 1/8 in. in diameter, though Emma Pumpkin said they "used to be about 3 inches long". These were said to be of "a bone naturally white inside and red outside." Thrall thought they looked like china.

lišaniu: blue, looked like glass with cut facets. Informants claimed they were "some kind of bone that lives in the ocean" and that the facets were made by being cut with obsidian.

Unnamed: black inside, brownish red out- [323] side. Thrall thought these looked like baked clay. One was pinkish inside and speckled red outside, which the informant said happened when the bead was burned [fired clay or in cremation?]. These beads were pointed out as especially old.

A dark green bead which came from the sea was described by J.R. He said these were strung with long white beads in between "to make it pretty and hold the beads together." He said this cylindrical bead was a certain rabbit bone, long, straight, hollow, and white [possibly the clamshell hinge; possibly a local substitute. -- A.H.G.]. A length of bead money which was measured from the center of the wrist [804] around the edge of the extended hand was worth a fixed sum. Such money, in definite units, was used to pay for baskets and for any object, services, etc. While goods were used for payments or for trade, money was the preferred tender.

436 Soapstone beads 1/2 to 3/8 in. in diameter 324 and 1/8 in. or less long, with a 1/16-in. perforation, were "made in a belt" and traded for a basket, said M. M. had ten such beads she had found on the ground around Picayune. She did not know how they were made, but claimed they were native. [Perhaps these beads were worked into belts like those of Yokuts to the south; perhaps however, M. really meant strings of bead money. -- A.H.G.]

276 Tobacco.---Old people watched for the tobacco plants to ripen. When full grown but still green, the leaves were gathered, dried out somewhat; it remained a greenish color. The leaves were stored in a dry place, a little being taken out to smoke as wanted. "It smelled pretty near like white [man's] tobacco," said J.R. A tobacco of sweeter variety than that at Coarse Gold was said to grow farther north.

Cakes of tobacco were made from the dried leaves, pulverized and mixed with water. These little biscuits were two or three inches across,

[115] An exorbitant sum, perhaps named in the hope that Thrall was going to buy. The impression is made that none [487] of these informants knew anything about bead money. Their 439 statement that the obviously Spanish beads came from the ocean is entirely reasonable since that was the aboriginal source for all bead money, and Spanish beads came via the same trade route in native hands. -- A.H.G.

[P.229a] Western Mono NS25

W Y 482 [439] were identical with that of the Wukchumni. The Eastern Mono used these nets when coming over on trading trips.

MONEY, NUMERAL SYSTEM

W Y 436 [439] 804 All money came from the west through the medium of trade. B.O. thought that the Tachi themselves made humana; the Waksachi retain the Yokuts name for this slender tubular bead. They were valued at about twenty-five cents each according to B.O.; S.O. said they came about ten for one dollar, or eight if they were extra long. The small clamshell discs (močo´ko) were measured Yokuts-style around the hand and wrist (fig. 14, e, f, Pt. I). This length was then doubled and called a muke´č꞉t, and valued at about two dollars according to B.O. S.O.'s evaluation is wholly different, five cents for once around the hand and doubled (1 mukeč꞉t), ten cents. This is more in line with other statements. B.O. may have had the looped-up arm's-length unit in mind.

When red and blue European beads were introduced, these were measured by the handful, the red being more esteemed. The red ones were called piša´kono´gidi, the blue ones šil꞉´mkai in Waksachi.

W Y 192 802

Numerals (Michahai, S.O.)

1. y꞉t	15. y꞉´čum
2. pu´noi	16. čo´lpum
3. so´p꞉n	17. no´mčum
4. hatpa´na	18. mu´nčum
5. yit꞉´ñn꞉l	19. no´npom
6. ču´lipi	20. punoi´ tsi'ao
7. no´mč꞉n	21. punoi tsi'ao y꞉t
8. mo´noš	22. punoi tsi'ao punoi
9. no´n꞉p	23. punoi tsi'ao sop꞉n, etc.
10. tsi'a´o	30. sop꞉n tsi'ao, etc.
11. y꞉´čam	100. y꞉t pi´ča
12. po´ctom	1000. tsi'ao piča
13. co´yum	
14. ha´čpan	

PLEASURES

Games

W Y 526 The following games were played by the Waksachi.

Shinny.--This game (koniu´šiko, Michahai; nanata´kow꞉t, Waksachi) was played with a hole at one end of the field and a post at the other. The ball had to be holed five times, though not successively, in order to win. When the ball was struck to a partner down the field and did not reach him, he had to come down the field to get it (i.e., the striker did not go after it).

W Y [525] This was the favorite game for betting and side betting. Usually three or four men played on a side. There was no special way of choos-

accepted, he took the bird down[167] and was given a paying ceremony as described above (see also Wukchumni, Tachi). The purchasing chief could keep, resell, or free the bird at his will.

Accessible eagle and falcon aeries were owned by chiefs,[168] and the young birds taken from them each year. S.O. described the procedure of his father, K·lmi´š·t, winatum, and the chief, Pao'·č, at Tušao.

In the rocks on the steep hillside above Tušao there was a kini´ hawk's (Duck Hawk, the peregrine falcon) nest. The young hatched about March. Each spring the chief and his winatum went to get them. Although Pao'·č was an old man, it was he, rather than the winatum, K·lmiš·t, who climbed down over the edge of the bluff. He had a rope of ho' tied around his waist, and K·lmiš·t stood above, holding the other end. The nest was in a crevice about forty feet below the top of the rocks and about one hundred feet above the little valley bottom. When Pao'·č reached the nest he jerked the rope as a sign that he was safe. He had a deerskin, in which he wrapped the one or two small birds, and put them on his back in a carrying net slung from his shoulders. The old birds usually came back, scolding and making feints at the intruder. Then the chief would talk to the birds, telling them what was to be done with their children, how they were to be honored, and so on. At the same time he would be calling upon his supernatural powers for aid: "Pao'·č was helped by all his ain·č." Then the old man would jerk the rope and K·lmiš·t would help hoist him up.

The little falcons were too young to fly off. They were kept in the house for a while, but as they grew bigger they were put out in near-by trees where they sat or flew off a little as they pleased. Pao'·č and K·lmiš·t "had to go out every day to hunt fresh meat for the birds."

There was another hawk's nest about a quarter-mile farther up the cañon. This was a tua´kini', "who went off at night but stayed home all day,"[169] but its young were not taken.

Bear.--Bears were given ritual redemption, but only members of Bear lineages were called upon to pay. When the headman of a Bear lineage, who was usually an elderly man who had acquired dream power from Bear (i.e., he was not merely a plain lineage member) learned that a bear had been brought in to a village, he assembled his people. The head, paws and claws,

[167]The route was usually downward, i.e., plainwards, as the eagles were more prized at a distance from the hills.

[168]I failed to discover how these were inherited, whether they went with the chiefly office or to a natural heir who was not necessarily the succeeding chief.

[169]The identification of tua´kini' is uncertain; as a hero in Eastern Mono mythology he equates with the Yokuts Falcon who may be either the Prairie Falcon or Duck Hawk. The true night hawk is not supposed to occur in California.

2: Kroeber E-5 (ca. 1918) 1953
NS29 Yokuts NS29

scalp celebration or victory dance. It can accordingly be concluded that scalping customs were of relatively little moment in Yokuts life.

MONEY.

Ordinary money consisted of strings of shell disks, of the wampum type, *keha*. During the past hundred years the Yokuts derived at least part of their supply of this currency through visits to the ocean. It is uncertain whether such trips were made in purely aboriginal times. The unit of measurement in the north was the *chok*, one and a half times the circumference of the hand. In the south the *chok* was somewhat shorter, and was reckoned as half the *hista*, two times the circumference of the hand.

Long perforated cylinders, perhaps made from the columellæ of univalves or from clams of unusual size, were called *humna* or *humana*, and were exceedingly valuable. They came from the south, probably from the Chumash.

GREETINGS.

There was little or no handshaking before the white man introduced the custom. Kissing was another undeveloped greeting. Mothers kissed their children, and lovers each other in seclusion; but no one else. The usual greeting is *hileu ma tanin*, "where are you going?" An old form, now less used, is, in foothill dialect, *ma-wit hide*, "you, hello"; more literally, "you, where?"

Like some other Californians, the Yokuts call the years "worlds." *P'a'an tanshi*, "world went," denotes the lapse of a year.

BIRTH.

A woman about to give birth sat on the ground grasping a stake set up before her. At the moment of parturition she was raised by an assistant who grasped her from behind. The umbilical cord was tied with one of the mother's hairs, and severed with a knife of cane or elder wood, according to locality. The Chukchansi buried the cord; the Tachi preserved it by having the child wear it over its abdomen.

Husband and wife were under equal restrictions after the birth of a child. They ate no meat or hard food, and did not cook, hunt, work, or touch tools. The Yokuts attached the greatest importance to these observances, some of which were continued until the remnant of the cord dropped from the child's navel. and others for several months.

The monthly condition of women—which was thought to be connected with the dark period of the moon—was viewed with less scrupulous abhorrence by the Yokuts than among many tribes.

3: Latta-Y-5 (1923-1948)1949 NS29 Yokuts NS29
Wukchumne

123 438 484 Dunlap. None of them seemed to hurry, but with a few soft, murmuring Yokuts words they faded into the car.

At Dunlap we entered the gate of the first Indian camp. I expected them to finish their trading in a few minutes, so we could return to the Kaweah in short order. Although they [574] hurried from the car to the house, I noticed that the sack of hupud and the large bundle of chawkish were left in the car. They visited a few minutes, exchanging news of all the friends and relations. Then Ada grunted and we all trailed back to the car. On we went to another place, where the performance was repeated. I was impatient at this, as the afternoon was fast slipping away. I saw that I would probably be late for that dinner engagement, but I knew better than to say anything.

At the third place we had no more than entered the house than Ada grunted. Letha ran out to the car and carried in the basketry materials. The trade was soon made and in less than five minutes we were on our way back to the Kaweah.

On our return I asked Ichow why Ada had not traded at the first places we visited. He explained that those first people had their bundles of hupud made up too small. I remembered that bundles of hupud were hanging on the walls of the houses, but, until Ichow mentioned it, I had not observed that they were smaller than Ada's bundles. All the way home Ichow and Ada tried hard to explain to me how trading was carried on between the Yokuts tribes and how their bead money was used in connection with it.

● 436 438 [484] According to Ada, bundles of cladium root and redbud wood were made up the same size. But sword-fern root was made up about two-thirds as large. Because, as Ichow translated, "They had to travel a long way to get it and it had to be colored."

[195] Ichow, prompted by a few soft murmurs from the rear seat, explained at great length—great length for a Yokuts—how important it was to have everything put up in the right size. Here is one of his statements. "In them old days them old people don't got scales to weigh with, don't got yard-stick to measure with. They make that black paint all into same size [804] balls, not so big as your baseball. My old grandpa, *Che'-chis*, trade some balls that black paint for some balls white paint when I was a little boy. I see him do it. Both kinds paint they trade was in same size balls."

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

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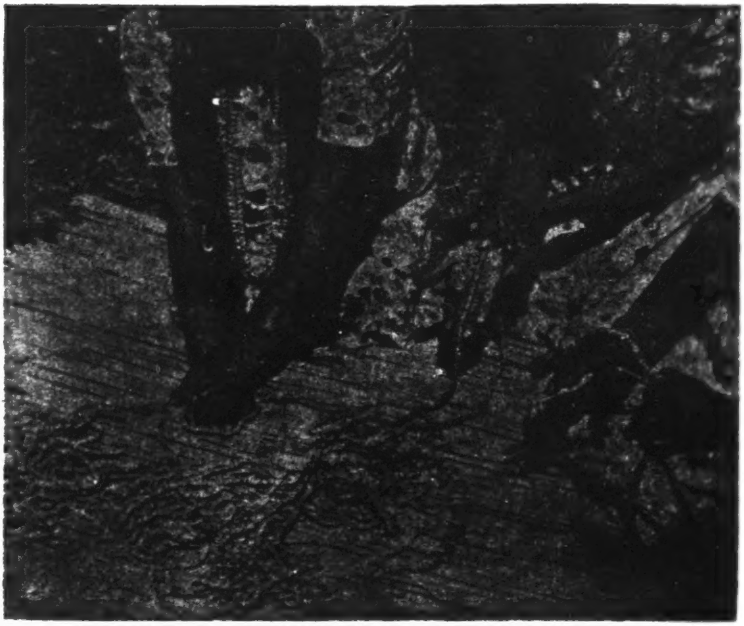

Yokuts bead money and three types of measurement used by various Yokuts tribes to denote one Chok, or unit of money. At the left is shown the measurement extending around the hand. At the center is the measurement extending from wrist to fingertips. At the right is the measurement around the hand foreward of the thumb. The Indian woman at the left is wearing strings of bead money around her neck and in her hair.

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804
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Between the Wukchumne, *Pahdwishi* and *Kaweah*, the *Chok*, or unit of measurement of bead money—in other words, the Yokuts dollar—was the distance around the hand, measuring just outside of the thumb. Among the *Telumne* (Tay'-lumne), distant only twenty miles from the Wukchumne, it was the distance from the tip of the longest finger to the first wrinkle in the wrist. Incidentally, these two distances are almost equal. Some of the Yokuts tribes measured the chok around the rim of the hand. Ichow explained that in such cases the hand was placed flat on the ground and the beads measured around the hand from the last joint of the thumb to the last joint of the little finger.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

438 436 Said Ichow, "When you trade with them people, you got to know how much in their chok. You measure their chok and then you figure how much it is worth beside your chok."

435 438 In the old days one Wukchumne chok of beads of low value would buy twenty bundles of hupud or ahnup. A half chok of average shell beads would buy twenty bundles. Ichow explained how the half chok was measured: "You double the string [804] after you measure one chok." Two shell beads of low value would buy one bundle of basketry materials, or one tanned deerskin. Ten average beads would buy one tanned elk skin or two tanned antelope skins.

436 From *Yoimut*, an aged *Chunut*, from *Pahmit*, an aged *Dumna* (Doom'-nah) and from other Yokuts, I learned that both asphaltum and paint of various colors in standard pack were also traded and sold for money throughout Yokuts territory. [804] This standard size is uniformly described and approximates a size midway between that of a tennis ball and a baseball. Their statements were substantiated by archaeological remains in widely separated portions of Yokuts territory.

436 172 When the Smithsonian Institution expedition of 1937 excavated the old *Tulamni* Yokuts village at the east point of the Buena Vista Hills in western Kern County, a number of balls of asphaltum were recovered. They were almost exactly the size described by my informers. Some appeared to have been wrapped in tules or in rabbit skin strips. This can be appreciated when one takes into consideration the stickiness of asphaltum. I also recovered similar balls of asphaltum in Indian cemeteries at Alamo Solo in southwestern Kings County, and at the Sweet Mound, about four miles southwest of Waukena in western Tulare County.

[201 372] It is of interest to note here that Wahumchah states that these balls of asphaltum were burned by the Yowlumne to provide the black smoke for sending smoke signals.

At the Menjoulet Rancheria on Los Baños Creek in western Merced County I found two "standard pack" balls of red pigment and one of white, also several crude chunks of the diatomaceous earth from which the white pigment had been prepared. The balls of pigment showed the finger prints of the person who had formed them. In the Broder Mound (west center of Section 31, T18S, R26E, MDB&M) I recovered from disturbed burials one standard ball of black pigment, probably made of burned graphite taken from the old Yokuts diggings

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

near Aukland. In an old cemetery on Grizzly Gulch, about on a line between the villages of Woody and White River, I found both yellow and red pigment in standard sized balls. 436 172

If the uniform size of the above findings is to be considered as more than purely coincidental they show a remarkable spread of standardization.

YOKUTS TRADE AND TRADE ROUTES

From widely scattered specimens of paint pigment, pipestone, and other objects easily identified as having come from specific localities, it is well known that the North American Indians had established extensive trade routes. From a grave near Dunlap in eastern Fresno County was taken a remarkable piece of pottery, a water jar of fired red clay, having on top a well modeled human head, and around the sides five openings. This jar was identified by Dr. F. W. Hodge, Director of the Southwest Museum, Pasadena, as probably being of *Mojave* manufacture. It was probably traded to the *Entimbits* Yokuts from the Mojaves. 487 439 [172]

In my own collection is a small decorated clay pitcher and a decorated clay pipe. The pitcher was excavated by a Tulare resident in an Indian burial ground at a locality known as Turnbull, west of Tipton. The clay pipe was collected from the cultivated surface of an Indian village site near Alpaugh. Both were identified by the late Dr. T. T. Waterman of Fresno State College as having come from northeastern Arizona, or southeastern New Mexico. In my collection are also an ancient rusted iron axe and the badly rusted pieces of what was probably once a sword. These were excavated from an old *Choinok* Yokuts cemetery, six miles east of Visalia. These were the only articles of white manufacture recovered from approximately six hundred burials excavated at that site and so must have been traded to that village soon after the Spanish first visited the coast of California. 487 439 172 [177]

Obsidian, or volcanic glass, from Mono and Inyo Counties, is found at Indian village sites along the California coast.

Coast seashells are found as far east as Arizona and New Mexico. Dozens of other evidences of Indian trade could be cited. But we have more than archaeological evidence.

Yoimut, last survivor of the Chunut Yokuts tribe from the northeast shore of Tulare Lake, related to me that organized trade was carried on between her people and those on the coast. 487 439

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

439 It is difficult to obtain a set standard of Yokuts values
436 that white people can understand. It has also been very diffi-
487 cult to obtain from the Yowlumne an easily understood explana-
tion of such values. Perhaps the simplest of these has been that between deer skins and obsidian, a bundle of fifty tanned deer skins bringing about fifty pounds of obsidian.

In Yowlumne territory obsidian could be traded for anything, and had a very high trade value. It could be taken to Yokohl Valley and traded for soapstone, or to the West Side and traded for asphaltum. Some traders carried obsidian to the sea coast to trade for the seashells named above.

A few definite things have been learned about the value of seashells, which were the basis of most Yokuts money. One of these is that the complete shells had little value compared to the beads that were made from them. From one periwinkle, or olivella shell, at most three beads could be made and this required much labor. One tanned deerskin was worth three such beads. Beads or ornaments made from abalone, keyhole limpet, or Pismo clam shells had more value than did those made from periwinkle shells. These ornaments, or beads, were much larger than those made from periwinkle shells. From these few facts can be determined the relative values of a number of Yokuts commodities.

When the first white settlers arrived in the San Joaquin Valley they paid the Indians as much as twenty-five cents for a large, tanned deerskin. Some were purchased for as little as five cents. This furnishes almost the only data available concerning the comparative values of Yokuts and white money.

436 In 1852 a Kaweah Indian boy was brought to trial at Vi-
685 salia for shooting an arrow into a work ox and seriously injuring it. For this offense he was fined fifty buckskins. The fine was promptly paid by his people. From early records and the statements of pioneers we know that an ox was at that time worth from sixty to eighty dollars. If we knew what portion of the value of the ox the fine represented we would have a ready measurement of the value of buckskins. We are probably only justified in assuming that an uninjured ox was valued at more than fifty buckskins.

439 Wahumchah's grandfather and a brother of this grand-
487 father were two of the four Yowlumne Yokuts who swam with Padre Garcés across Kern River at the Rio Bravo Rancho (present Oleese Ranch) in May of 1776. The great-uncle lived

3:. Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

439 brother take big roll of tanned deer skins, maybe antelope skins,
to desert, bring back maybe fifty pounds *kots* (obsidian). Then
487 he make good arrow points and sell 'em for good Yokuts money, maybe shell beads, maybe *kadis* (steatite) beads. He sell one good tanned deerskin for one good kadis bead, maybe three good seashell bead."

The preceding represents all the definite information I have been able to record concerning Yokuts trading and trade routes, but around the remainder of the rim of the San Joaquin Valley are easy mountain passes which show signs of Indian encampments and which were undoubtedly old Yokuts trade routes. The fact that early Spanish and American expeditions traveled these passes, often guided by Indians, makes it almost certain that they were so used. Some diaries kept by scribes accompanying these early expeditions actually record that they were following Indian trails.

Most prominent of these old routes through the Coast Range are the following: Coalinga to San Benito and King City; Big Panoche Valley; Los Baños Creek and via Saucelito and Quien Sabe Valleys; San Luis Creek and Pacheco Pass; Orestimba and De la Puerta Creeks; Hospitál Creek; Corral Hollow; Buenos Aires Creek; and Altamont Pass. Over most of these passes roads were established early in the settlement of the San Joaquin Valley. Old trails through them connected with others paralleling the Coast Range and Sierra foothills and the west bank of the San Joaquin River and the lakes to the south. Along these three last routes were established the first wagon roads to traverse the length of the San Joaquin Valley.

THE YOKUTS MONETARY SYSTEM

436 It will come as a surprise to many persons that the Yokuts, so often contemptuously described as "diggers" or "the lowest form of human life," were among the few Indians in North America who developed a medium of exchange worthy of being classified as a monetary system. This writer had gathered data from aged Yokuts for about twenty years before he became aware of the fact that when the Spanish arrived the Yokuts were advancing out of the more primitive trade and barter culture into that of a system of monetary exchange. True, their monetary system was very crude, but the necessary elements were there and the money could not be successfully counterfeited. A penniless Yokuts could kill deer, tan the skins, carry them

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

into the desert territory where they were scarce, trade them for obsidian, which was plentiful there, return it to his own land and sell it for Yokuts shell or steatite beads, which passed for money. It will be seen from this and from what is to follow that Yokuts money represented principally the accumulation of labor. 436

The cheapest Yokuts money was made from periwinkle or olivella shells with the tips ground off, so they could be strung. The smaller shells were of less value than the larger. The *Wukchumne* Yokuts called these shells *Chawik*. Olivella shells were made into three forms of beads besides the one describd. They were split in half. The large, outer half was punched for a string. Some of these beads were five-eighths of an inch across and more than an inch long. In some Yokuts cemeteries these two crude forms of Yokuts money have been found in great quantities; in some instances there have been several gallons in one grave, the hoarded savings of the first penny-pinchers and nickel-grabbers of the San Joaquin Valley. [454]

The whorl of the periwinkle was made into a thick bead having a curved edge. When strung, these nested somewhat like the snake-like gold chains made by modern jewlers. One of these beads was worth six of the shells with tips ground off, or two of the large half-shell beads. They were called *Huchin*.

From the thin lip of the periwinkle shell was made a bead which sometimes strung as many as twenty to the inch. "Two of these," said *Wahumchah*, an aged *Yowlumne* Yokuts, "were worth one curved bead. We called them *Mochowkuh* (Mochow'-kuh)." Beads made from purple mussel shell were called *Sueyuk* (Suey'-ook). From the keyhole limpet shell a hair ornament was made. Wahumchah stated that they were not common and that he did not know the value they had in relation to the other old Yokuts money. [301]

From fine-grained steatite the Yokuts made a valuable form of bead-money. This steatite was mined by the *Yokodo* Yokuts near Lindsay Peak, east of the present town of Lindsay. It was traded or sold by them to Yokuts traders from tribes over the entire southern San Joaquin Valley. Steatite bead money was very valuable. Wahumchah stated that it was three times as valuable as the most valuable olivella beads. Near Woodville I once found a place where a steatite bead maker had manufactured and cached his product for many years. From the sandy soil I screened thousands of completed beads, as well 436 324 [438]

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

436 as more thousands in all stages of completion. A study of these
324 proved that the steatite was first split into thin slabs, gouged, scraped, and sanded smooth, then cut into strips by means of a chipped stone saw. I found two of these saws, their chipped
[412] edges still coated with steatite. The strips were next cut into squares. Cuts were made from opposite sides until the strip was severed. Then holes were drilled in the square blanks.

Ichow, last chief of the Wukchumne, explained to me the whole process of making steatite beads, not knowing at the time that I had already found proof of almost every statement he was making. Said Ichow, "When I was a boy I saw an old Wukchumne man make lots beads. He drive stake in ground. He sit on ground straddle that stake. He cut little square hole in top that stake. He put square bead in that hole. Then he take little stick with *kots* (obsidian) drill point on end. He spin that drill between his hands and make holes in them square beads."

Ichow went on to explain that the square beads were strung on a small, hardened rod of chamise wood and rolled between the hand and a gritty, flat piece of sandstone. This ground the corners from the square beads and left them of uniform size. This steatite bead was the most common form of Wukchumne money. Said Ichow, "Most our money was them soapstone beads. Them *Telumne, Kaweah, Koyeti,* and *Choinok* used the same beads almost all time. Them *Chunut, Tachi,* and *Wowol* people used more shell money, but they used some our soapstone money, too."

The most interesting feature of this steatite Yokuts money is that the edges of it were milled, almost exactly as are the edges of our silver dollar. The principal difference in the milling was that the Yokuts bead-money was milled at an angle with the flat sides. This milling is surprisingly uniform and will be found on this form of Yokuts money at old village sites from Paleta and Tejon Canyon on the south, to Coalinga and Friant on the north.

436 Spangles and ornaments of various forms and sizes were
301 made from abalone shell. I have several statements establishing the fact that they passed from person to person as money; but because of their supernatural power, they were valued so highly that such use was greatly restricted. They were known as *Tahp* and were used on *Tripne* (supernatural) ceremonial costumes. They were also placed over the eyes, ears, and/or

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

They were also placed over the eyes, ears, and/or mouth of the dead, as Ichow stated, "So that dead person could see, hear, talk good in *Tihpiknits'* (keeper of the hereafter) *Pahn* (land)." Such use of Tahp has been found in some of the most ancient burials discovered in Yokuts territory, which indicates that it had long been valued by the ancestors of those people.

The most valued of all Yokuts money was made from the shell of the famous Pismo clam. Most of this Pismo clam shell-money was probably traded through Cuyama Valley from Canaliño neighbors to the southwest. Tejon informants have stated to me that the word, *Cuyama*, was the Canaliño name for the Pismo clam shell and that the Cuyama Valley was the channel through which these shells were traded to the Yokuts. Curiously enough, clam-shell ornaments are less common in adjacent Yokuts territory than they are farther north in Chunut Yokuts territory. My informers concerning the above were Rosa and Ramon Hino and Juan Losada of Tejon Canyon. Wahumchah, one of the last two living Yowlumne Yokuts, has told me that his tribe obtained their clamshell money through the Cuyama. Wahumchah's father and grandfather were both traders and his observations along these lines should carry more than ordinary weight.

I have heard no claims made that Pismo clam shell-money had any curative or preservative powers, only that it had great value as money. This is borne out by the use made of it in Yokuts burials. It was almost always placed in the mouths of the dead. *Yoimut*, an aged Chunut, once stated to me, "To pay them bad fish-people to let the dead person cross that narrow bridge to Tihpiknits' Pahn. They put it in the mouth so that dead person don't lose it and he sure to have it when he get to Tihpiknits' Pahn."

The Pismo clam ornaments were of three standardized shapes and had holes drilled through them. Discs were made in sizes from more than two inches in diameter to less than one-half inch. The edges of most of these were decorated with incised geometric forms in several designs. Indications are that the incisions were originally rubbed full of asphaltum. This bright black material contrasted strikingly with the white of the clam shell and made them the most spectacular and impressive forms of stone or shell money, or ornaments produced by the Yokuts.

[i.e., sprudges and ornaments of abalone shell.—Ann Bs]

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

436 321 From the Pismo clam were also produced nicely smoothed and rounded curved objects with pointed ends. These were drilled from the pointed ends, the opposing holes meeting at the middle. I have never seen one of these objects taken any place in Yokuts territory, except from the mouth cavity of a buried skeleton.

Slender, straight-sided tubes were also made from Pismo clam-shell. They varied from three-eighths of an inch in diameter and three inches long, down to one-fourth of an inch in diameter and less than one inch long. Some were not cylindrical, being larger at the middle than at the ends. The Wukchumne Yokuts called these *Cutscotch* (Coots'-cotch).

The most valued of all clamshell money were long, curved tubes. These varied with the size of the shell, the largest being more than six inches in length. They were slightly wider than they were thick and were perforated lengthwise. This perforation is the most remarkable feature of all Yokuts manufactures.

The shell of the Pismo clam is as hard as the glaze on a piece of china. To drill two opposing holes, each three inches deep, through such material, having them meet in the middle, is a feat worthy of modern tools in the hands of a practiced mechanic. Mayfield, who was a white man raised by the *Choinimni* [439] Yokuts, stated to me that an old artisan of that tribe obtained in trade slender objects which he (Mayfield) believed were "walrus, or sea lion whiskers." The large ends of these were pounded between two rocks, forming a sort of short-bristled brush. A shallow hole was drilled with a stone-pointed drill as a starter. Fine, sharp sand was placed in this hole. Then the brush-pointed "whisker" was placed on top of the sand and spun between the palms of the hands. Mayfield had not seen the Pismo clam money drilled in this manner, but had seen other hard objects so drilled. From Ichow I learned that an identical process was used by the Wukchumne and Yokodo. The only variance was that no "whisker" of any sort was used. The drill was made from the slender chamise-root splint used in reducing [412] the square steatite beads to a round form. Said Ichow, "That old fellow take piece of green chamise root and scrape it just about this size [illustrating with a piece of ordinary bailing wire which he picked up beside his chair and which he continued to hold in his hand as he talked]. Then he hold this piece root over fire and scrape and dry him good and straight and hard like

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

this wire." A brush was pounded on the end of the chamise-root splint and use made of it exactly as described by Mayfield. 436 321

In my collection of Indian artifacts are a number of these Pismo clam-shell tubes that had been broken before they were placed in the mouths of the dead. In a number of cases it is clearly shown that the two opposing holes did not at first meet at the middle. In the correction of this error was involved the most surprising feat exhibited in all Yokuts manufactures. The drill was diverted so that a branching hole was made and the two holes did meet. This was done so as not to be visible until the tube was broken.

The common Yokuts name for the Pismo clam form of Yokuts money is *Humasa* (Hoo-mah'-nah).

4: Gayton E-5 (1925-1930)1946
NS29 Yokuts NS29

thousand complexities it lives and moves in constant impingement upon simple dwellers on the earth. Much of that life and movement is regular and repetitive: the weather, floral, and faunal changes on a broad seasonal scale, and lightness and darkness, sun, moon, and stars, temperatures, animal and floral behaviors were on schedule in the narrow diurnal round.

The reiterative factor would seem to be an impressive one in the maintenance of cultural activity which has once been linked to it: the right time comes for a complex of behaviors—a ceremony—and that time is an ephemeral thing which the culture must meet in a series of events of immutable order. The natural schedule cannot be changed, and the ceremonies are performed—if they are to be performed at all—at the convenience of the environment, not the convenience of the people, so to say.

External reminders of cultural forms were met at any turn in the trail, on every hand, day in and day out, where animal creatures roamed or flew. They were living symbols of themselves in the religious and political systems of Yokuts-Mono culture, and as inescapable in their roles of superhuman contributors to the mode of Yokuts life as were any utilitarian plants or trees which provided materials for foods and tools. Inasmuch as the environmentally attuned parts of Yokuts-Mono culture were nuclear or thematic the natural features in which they had their basis may be said to have some dynamic force as cultural integrators in the functional sense.[22]

However, I am too uncertain as to how integration (as a cultural process) may work in actuality to wish to propose that cultural changes away from these forms could not occur. For example, the symbol might become more important than the actuality, e. g., the weazel's skin, the shaman's sacred talisman imbued with supernatural power, might usurp the shaman's concern with the beast itself in real life and in his dreams. Shifts in emphasis are unpredictable and entirely possible even while forms still are mechanically adjusted to external features. The mere fact that a thing—say Eagle—has one hundred connotations in Yokuts culture against one of Goldfinch does not preclude loss of Eagle's role in that culture, although the greater entrenchment is in his favor.[23]

I do not want to evade the psychological aspects of cultural integration for it seems to me that no full discussion of it as a dynamic or functional process can

22 See Opler, *Themes as Dynamic Forces in Culture.*

23 A somewhat amusing aside here: the appearance of metal money with Eagle thereon was in perfect conformity with aboriginal Yokuts thought. Eagle, as the symbol of the chiefly lineage and as the dream-helper for acquisition of wealth, was manifestly not only the rightful but the inevitable imprint for the invading White culture's coinage—as informants frequently and proudly pointed out.

7:Powers J-5 (1871-1876) 1877 NS29 Yokuts NS29

inchoate arrow-head is laid on this pad along the thick of the thumb, the points of the fingers pressing it firmly down. The instrument used to shape the stone is the end of a deer's antler, from four to six inches in length, held in the right hand. The small round point of this is judiciously pressed upon the edge of the stone, cleaving it away underward in small scales. The buckskin, of course, is to prevent the flesh from being wounded by the sharp scales. The arrow-head is frequently turned around and over to cleave away as much from one side as the other, and to give it the desired size and shape. It is a work of no little care and skill to make even so rude an instrument as an arrow-head seems to be, only the most expert being very successful at the business. Old men are usually seen at this employment."

Mr. B. P. Avery, in an article entitled "Chips from an Indian Workshop", published in the same magazine, gives a very pleasant account of a visit made by him, near the summit of the Sierra, to what had evidently been the spots selected by the aborigines for the manufacture of these arrow-heads. They were generally so chosen as to show that the Indians had an eye for the picturesque and the romantic, on bold, overlooking promontories, commanding prospects far and wide down the mountain slope and over the plains; and the brilliant-colored chips of obsidian, jasper, chert, cornelian, and other flints, lying in piles, completed a very pleasing picture.

Most California Indians go now, and always have gone, barefoot; but some few were industrious enough to make for themselves moccasins of a very rude sort, more properly sandals. Their method of tanning was by means of brain-water. They dried the brains of deer and other animals, reduced it to powder, put the powder into water, and soaked the skins therein—a process which answered tolerably well. The graining was done with flints. Elk-hide, being very thick, make the best sandals.

The usual shell-money is used among them, and a string of it reaching from the point of the middle finger to the elbow is valued at 25 cents. A section of bone, very white and polished, about two and a half inches long, is sometimes strung on the string, and rates at 12½ cents. They uniformly undervalue articles bought from the Americans; for

7:Powers J-5 (1871-1876) 1877 NS29 Yokuts NS29

436 instance, goods which cost them at the store 85 they sell among themselves for 83, or thereabout. This is done by the old Indians, who consider an Indian dollar better than an American.

252 They say that, in remote times, they were accustomed to rub their [173] acorns to flour on a stone slightly hollowed, like the Mexican *metate*, which was a suggestion of the mouse; but nowadays they pound them in holes on top of huge bowlders, which was a suggestion of the wiser coyote. On a [172] bowlder in Coarse Gold Gulch, I counted eighty-six of these acorn-holes, which shows that they must have been used many centuries.

283 For snaring quail, rabbits, and other small game, they employ cords 224 made of a kind of "wild flax" found in the Sierra. I presume this "wild flax" is milkweed (*Asclepias*).

272 Manzanita cider is made of a much better quality than the wretched stuff seen among the Wintūn. After reducing the berries to flour by pounding, they carefully remove all the seeds and skins, then soak the flour in water for a considerable length of time. A squaw then heaps it up in a little mound, with a crater in the center, into which she pours a minute stream of water, allowing it to percolate through. In this way she gets about a gallon an hour of a really delicious beverage, clear, cool, clean, and richer than most California apple cider. The Indians consume it all before it has time to ferment, so that they do not get intoxicated on it.

226 In the mountain streams which empty into Tulare Lake they catch lake trout, chubs, and suckers. Sometimes they construct a weir across the river with a narrow chute and a trap set in it; then go above and stretch a line of brushwood from one bank to the other, which they drag down stream, driving the fish into the trap. Another way is to erect a brushwood booth over the water, so thickly covered as to be perfectly dark inside; then an Indian lies flat on his belly, peering down though a hole, and when a fish passes under him he spears it. The spear is pointed with bone, and is two-pronged. Still another method is employed on Tule River and King's [481 River. An Indian takes a funnel-shaped trap in his teeth and hands, buoys 501] himself on a little log, and then floats silently down the rapids, holding the net open to receive the fish that may be shooting up. On Tulare Lake they construct very rude, frail punts or mere troughs of tule, about ten feet

10: Beals & Hester E-4, 5 (no date) 1958
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did not secure enough rabbit skins for their own needs, securing additional skins in trade from the east.

These conclusions are supported by data from the only large archeological excavations in the near vicinity, on Buena Vista lake to the south, with very similar environmental conditions. Wedel reports that at one site in 3700 cubic yards excavated only 1053 animal bones were recovered. Of these, 411 were bird bones and 142 terrapin bones. Elk and antelope numbered 61 and 45 respectively. Two hundred and one rabbit bones were found, most of them jack-rabbits (*Lepus*). In contrast to the small number of elk and antelope bones, bones from the genus *Canis* (probably mostly domestic dogs, but including some coyote) numbered 127.[12]

The Tachi, to some extent, were middlemen in the trade of sea shells from the ocean to the interior and are reported to have done some processing of ocean shells secured in trade from neighbors to the west. Considering their environment, the Tachi apparently were dependent upon their neighbors, especially those to the east, for the following items: obsidian, steatite, stone mortars, oak mortars, pestles and sinew backed juniper bows. In addition, they traded for pottery, basketry, pigments, rabbitskins and rabbitskin blankets and acorns. In exchange they provided lake products including fish, tule mats, salt from salt grass and shell "money" they manufactured from shells secured in trade. That the lake resources were important is indicated by the fact that, although some Yokuts' neighbors were allowed to visit the lake themselves, trade with westerners was carried on at a distance from the lake apparently in part with the intention of preventing them from learning the techniques of securing the products.

The picture emerges clearly, then, of a desert-dwelling people who, paradoxically, were oriented toward a water-based economy. Without the lakes, marshes, and sloughs, the land would have supported only the scantiest population, and, in fact, large areas, especially to the west, were rarely visited. For the Tachi the acorn appears as a relatively unimportant luxury and not as a staple.

If we turn to non-material culture, the differences between the lake dwellers as exemplified by the Tachi, and the acorn using Yokuts to the east, largely disappear. In the existence of "tribes" sharing a common dialect and capable of common action, the existence of semi-

[12] WEDEL, p. 11. The remaining data on the Tachi and their neighbors are from Gayton, Kroeber and Latta.